

Recent IBM patents

The following patents were recently issued by the countries in which the inventions were made. For U.S. patents, titles and names supplied to us by the U.S. Patent Office are reproduced exactly as they appear on the original published patent.

Switzerland

109,964 W. Bux, R. C. Dixon, and E. H. Rothauser Synchronization in a Communication Network of Interconnected Rings

United Kingdom

1,028,784 J. A. Wiseman Point-of-Sale Terminal

United States

4,565,946	W. H. Barrett and A. B. Minn	Color Cathode Ray Tube with Infrared Emitting Phosphor in Screen
4,567,096	D. H. Piltingsrud and J. C. S. Shen	Hydrated Alumina Binder System
4,584,763	C. G. Jambotkar and S. D. Malaviya	One Mask Technique for Substrate Contacting in Integrated Circuits Involving Deep Dielectric Isolation
4,585,212	G. M. Yanker	Lift Device of the Scissor-Jack Type
4,585,310	N. J. Ciecak, R. J. Cox, J. S. Feng, and J. Leff	Alignment Layer Orientation in Raster Scan Thermally Addressed Smectic Liquid Crystal Displays
4,585,315	G. T. Sincerbox, H. W. Werlich, and B.-H. Yung	Brightfield/Darkfield Microscope Illuminator
4,585,342	B. J. Lin and Y. Taur	System for Real-Time Monitoring the Characteristics, Variations and Alignment Errors of Lithography Structures
4,585,348	J.-C. A. Chastang, W. W. Hildenbrand, and M. Levanoni	Ultra-Fast Photometric Instrument
4,585,397	R. P. Crawford and R. B. Watrous	Dual Bellows Pump with Drive Circuit Through Bellows
4,585,492	Z. A. Weinberg and D. R. Young	Rapid Thermal Annealing of Silicon Dioxide for Reduced Hole Trapping
4,585,606	R. W. Cornell, J. K. Howes, W. B. Koteff, and D. K. Rex	Method of Making an Endless Forms Feed Tractor Belt
4,585,692	D. R. Klueh, B. F. Livingston, J. F. Martone, and M. J. Zutt, Jr.	Aliphatic Polyurethane Matrix Transfer Medium and Porous Magnesium Silicate Filler
4,585,953	G. J. Gaudenzi, J. P. Norsworthy, N. V. Phan, and D. C. Reedy	Low Power Off-Chip Driver Circuit
4,586,035	D. C. Baker, K. A. Bohrer, and G. A. Flurry	Display Terminal with a Cursor Responsive Virtual Distributed Menu
4,586,071	S. Tiwari	Heterostructure Bipolar Transistor
4,586,134	B. E. Norstedt	Computer Network System and Its Use for Information Unit Transmission
4,586,158	R. T. Brandle	Screen Management System
4,586,705	J. Satoh, H. Ino, M. Ishikawa, and M. Iguchi	Automatic Paper Feeding Device for a Facsimile Equipment or the Like Apparatus
4,586,830	D. L. Carter	Combination Rotary Gas Bearing and Seal Apparatus
4,586,835	R. W. Alexander and D. Troupes	Printer for Printing Characters in Two Alternative Print Qualities
4,586,837	S. D. Johnson, A. French, A. E. Ellis, D. R. Hedrick, and C. D. Helfenberger	Ink Ribbon Cartridge Indication System for Printer
4,587,139	J. A. Hagan, J. E. Maloy, and M. A. W. Wilke	Magnetic Disk Coating Method and Apparatus
4,587,464	C. T. Ho and J. G. Wilman	Electron Beam Control System
4,587,540	T. N. Jackson	Vertical MESFET with Mesa Step Defining Gate Length
4,587,579	J. Cocke and T. H. DiStefano	System for Position Detection on a Rotating Disk

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4,587,612	D. E. Fisk, R. L. Griffith, M. E. Homan, G. Radin, and W. J. Richards	Accelerated Instruction Mapping External to Source and Target Instruction Streams for Near Realtime Injection into the Latter
4,587,628	G. D. Archer and H. J. Greenberg	Method and Apparatus for Dynamic Invocation of Utilities
4,587,629	F. D. Hill, S. Gupta, and P. J. Warter	Random Address Memory with Fast Clear
4,587,631	R. C. Nielsen, J. A. Aiken, Jr., and A. M. Herzik	Automatic Text Adjustment
4,587,709	A. B. Fowler and A. M. Hartstein	Method of Making Short Channel IGFET
4,587,727	W. Goff, Jr.	System for Generating Circuit Boards Using Electroeroded Sheet Layers
4,587,835	G. E. Adams	Light Pipe and Heater Apparatus
4,588,263	D. K. Cohen and R. Yardy	An Adjustable-Optical Prism with Integral-Polarizing Beam Splitter and Applications Thereof
4,588,471	J. H. Griffith, E. H. Henriques, J. L. Kehoe III, and M. J. Suskie	Process for Etching Composite Chrome Layers
4,588,490	J. J. Cuomo, H. R. Kaufman, and S. M. Rossmagel	Hollow Cathode Enhanced Magnetron Sputter Device
4,588,890	S. J. Finnes	Apparatus and Method for Composite Image Formation by Scanning Electron Beam
4,588,947	M. B. Ketchen	Integrated Miniature dc SQUID Susceptometer for Measuring Properties of Very Small Samples
4,588,957	A. C. Balant and D. R. Grischkowsky	Optical Pulse Compression Apparatus and Method
4,588,985	J. L. Carter and M. N. Wegman	Polynomial Hashing
4,588,987	L. K. Stephens	Display System for Monitoring and Alarm System
4,589,036	J. R. Bertschy, T. J. Cameron, K. L. Deckert, and S. L. Lee	Apparatus and Method for Instrumented Radial Translation of a Read/Write Transducer at Start-up of a Rotating Disk File
4,589,037	S. Jen, W. J. Kabelac, and I. L. Sanders	Servo Control System Using a Varying Frequency Servo Pattern for Read/Write Head Positioning in a Magnetic Recording Disk File
4,589,041	O. Voegeli	Differential Magnetoresistive Sensor for Vertical Recording
4,589,042	N. C. Anderson and R. E. Jones, Jr.	Composite Thin Film Transducer Head
4,589,065	M. A. Auslander, J. Cocke, H. T. Hao, P. W. Markstein, and G. Radin	Mechanism for Implementing One Machine Cycle Executable Trap Instructions in a Primitive Instruction Set Computing System
4,589,080	J. J. Abbott, J. E. Bierschbach, K. N. Bobo, and G. S. Herring	Apparatus and Method for Predicting Failure in a Copier's Paper Path
4,589,087	M. A. Auslander, J. Cocke, H. T. Hao, P. W. Markstein, and G. Radin	Condition Register Architecture for a Primitive Instruction Set Machine
4,589,092	R. E. Matick	Data Buffer Having Separate Lock Bit Storage Array
4,589,112	F. O. Karim	System for Multiple Error Detection with Single and Double Bit Error Correction
4,589,130	C. Galand	Multirate Digital Transmission Method and Device for Implementing Said Method
4,589,142	G. M. Bednar	Method and Apparatus for Character Recognition Based Upon the Frequency of Occurrence of Said Characters
4,589,193	G. R. Goth, T. A. Hansen, and R. T. Villette, Jr.	Metal Silicide Channel Stoppers for Integrated Circuits and Method for Making the Same
4,589,584	R. A. Christiansen, F. M. Rose, Jr., J. R. Smith, and K. D. Woosley	Electrical Connection for Polymeric Conductive Material
4,589,621	R. E. Hunt and V. E. Whitehead	Ergonomic Monitor Stand
4,589,790	J. S. Corbin, Jr., D. R. Polk, and C. N. Ramirez	Method and Apparatus for Controlling Escapement
4,590,094	F. C. Ringer, Jr.	Inverted Apply Using Bubble Dispense
4,590,258	H. G. Linde, M. W. MacIntyre, and W. T. Motsiff	Polyamic Acid Copolymer System for Improved Semiconductor Manufacturing
4,590,550	J. H. Eilert, A. L. Levin, and T. Julian	Internally Distributed Monitoring System
4,590,574	H. D. Edmonds and M. V. Kulkarni	Method for Determining Oxygen and Carbon in Silicon Semiconductor Wafer Having Rough Surface
4,590,585	K. D. Cummings, D. R. Gould, F. C. Gray, and L. W. Pereira	Character Generator for Raster Printer
4,590,606	G. D. Rohrer	Multi-Function Image Processing System
4,591,120	K. C. Bryant-Jeffries, I. Golledge, J. V. Pike, and E. V. Vaughan	Tilttable and/or Rotatable Support for Display Device
4,591,123	T. H. Bradshaw, I. Golledge, and J. V. Pike	Adjustable Brake Assembly
4,591,236	E. C. Broockman and R. S. Fortenberry	Optical Scanner with Beam Directing Holograms at Window
4,591,242	E. C. Broockman, R. T. Cato, and L. D. Dickson	Optical Scanner Having Multiple, Simultaneous Scan Lines with Different Focal Lengths
4,591,282	J. P. Bradley	Drive Mechanism for a Ribbon Disc
4,591,283	F. Hilpert	Ribbon Correction Unit for Printers
4,591,540	H. Bohlen, E. Bretscher, H. Engelke, P. Nehmiz, P. Vettiger, and J. Greschner	Method of Transferring a Pattern into a Radiation-Sensitive Layer
4,591,727	G. Gaebelein, R. B. Bhend, R. D. Keillor, J. L. Lovgren, and J. R. Mercer	Solid State Scanner for a Variable Speed Transport
4,591,738	J. S. Bialas, Jr., R. J. Daniels, and W. J. Mruk	Charge Pumping Circuit

4,591,840	D. E. Curtis, J. P. Vincent, and M. E. Weidmann	Calendar Event Description Abbreviation
4,591,847	T. N. Criscimagna and A. O. Piston	Method and Apparatus for Gas Display Panel
4,591,969	R. D. Bloom, E. J. Burke, and E. T. Kozol	Microprocessor-Controlled Positioning System
4,591,982	J. P. Buonomo, S. R. Houghtalen, R. E. Losinger, and J. W. Valashinas	Storage Selection Override Apparatus for a Multimicroprocessor Implemented Data Processing System
4,591,993	W. R. Griffin and L. G. Heller	Methodology for Making Logic Circuits
4,592,013	E. S. Prame	Method and Device for Addressing a Memory
4,592,023	H. Beranger, A. Brunin, and J.-P. Rousseau	Latch for Storing a Data Bit and a Store Incorporating Said Latch
4,592,050	J. M. Bensadon	Apparatus and Method for Providing a Transparent Interface Across a Satellite Communications Link
4,592,057	L. D. Comerford	Versatile Digital Controller for Light Emitting Semiconductor Devices
4,592,628	C. Altman, E. Bassous, C. M. Osburn, P. Pleshko, A. Reisman, and M. B. Skolnik	Mirror Array Light Valve
4,592,670	E. H. Frank and S. R. Komplin	Angular Motion Paper Feed Release System
4,592,793	H. J. Hovel and T. E. McKoy	Process for Diffusing Impurities into a Semiconductor Body Vapor Phase Diffusion of III-V Semiconductor Substrates
4,592,933	B. S. Meyerson, R. M. Plecenick, and B. A. Scott	High Efficiency Homogeneous Chemical Vapor Deposition
4,592,944	R. J. Clark, J. Economy, M. A. Flandera, J. R. Susko, and R. A. Wheeler	Method for Providing a Top Seal Coating on a Substrate Containing an Electrically Conductive Pattern and Coated Article
4,593,016	W. J. Amelio, D. Y. Jung, V. Markovich, and C. J. Sambucetti	Process for Manufacturing a Concentrate of a Palladium-Tin Colloidal Catalyst
4,593,161	A. Desblache, C. Galand, and R. Vermot-Gauchy	Method of Initializing a Filter in an Echo Canceller and Communication System Using Said Method
4,593,216	F. P. Willcox	Rotary Stepping Motor Having Improved Construction
4,593,254	R. L. Coburn	VCO Centering Circuit
4,593,307	H. S. Rupprecht and S. Tiwari	High Temperature Stable Ohmic Contact to Gallium Arsenide
4,593,334	N. C. Anderson, L. E. Daby, G. A. Johnson, and P. M. McCaffrey	Thin Film Transducer
4,593,351	S. J. Hong, R. K. Nair, and E. Shapiro	High Speed Machine for the Physical Design of Very Large Scale Integrated Circuits
4,593,352	R. Castel, J.-L. Calvignac, and W. D. Draper	Method and Device for Exchanging Information Between Terminals and a Central Control Unit
4,593,362	P. H. Bergeron, K. D. Carpenter, J. B. Hickson, Jr., R. K. Jackson, K. W. Lallier, and E. K. Malone	Bay Packing Method and Integrated Circuit Employing Same
4,593,363	M. Burstein, S. J. Hong, and R. N. Pelavin	Simultaneous Placement and Wiring for VLSI Chips
4,593,407	A. Konishi and S. Matsuura	Pattern Processing System
4,593,820	C. H. Antonie and T. K. Murray III	Robotic, In-Transit, Device Tester/Sorter
4,593,956	M. B. Caruso and R. A. Scranton	Long Tube Bender Element Squeeze Bearing
4,594,273	S. D. Doss and P. B. P. Phipps	High-Rate Electroless Deposition Process
4,594,554	J. D. Schick	Programmed Control of Electron Beam Power
4,594,588	T. W. Barclay, J. R. Cielo, W. J. Martin, and J. B. Trushell	Plasma Display Margin Control
4,594,622	C. N. Wallis	Track Following Servo System for a Disk File
4,594,655	H. T. Hao, H. Ling, H. E. Sachar, J. Weiss, and Y. J. Yamour	(K)-Instructions-at-a-Time Pipelined Processor for Parallel Execution of Inherently Sequential Instructions
4,594,661	V. S. Moore, G. A. Veneski, T. E. Parker, J. C. Rhodes, Jr., W. R. Kraft, and W. L. Stahl, Jr.	Microword Control System Utilizing Multiplexed Programmable Logic Arrays
4,594,674	D. I. Boulia, M. W. Pousson, Jr., E. J. Pring, and N. L. Stone	Generating and Storing Electronic Fonts
4,594,677	J. P. Barlow	System for Detecting and Diagnosing Noise Caused by Simultaneous Current Switching
4,594,679	S. L. George and J. L. Hefner	High Speed Hardware Multiplier for Fixed Floating Point Operands
4,594,682	E. G. Drimak	Vector Processing
4,594,690	R. F. Meyers, F. Rossi, and W. Strahle	Digital Storage Apparatus Including Section Exhibiting Different Access Speeds
4,595,261	H. J. Baasch, D. S. Goodman, F. S. Luecke, R. L. Soderstrom, and E. A. Spiller	Phase Retardation Element and Prism for Use in an Optical Data Storage System
4,595,295	J. S. Wilczynski	Alignment System for Lithographic Proximity Printing
4,595,334	A. Sharon	Robotic Apparatus with Improved Positioning Accuracy
4,595,484	N. J. Giammarco and G. A. Kaplita	Reactive Ion Etching Apparatus
4,595,836	R. A. Simpson	Alignment Correction Technique
4,595,944	I. Antipov	Resistor Structure for Transistor Having Polysilicon Base Contacts
4,595,980	J. G. Innes	Interactive Data Processing System Having Concurrent Multi-Lingual Inputs

4,595,990	R. L. Garwin and J. J. Levine	Eye Controlled Information Transfer
4,596,000	S. K. Wiedmann	Semiconductor Memory
4,596,002	Y. H. Chan, F. D. Jones, and W. F. Stinson	Random Access Memory RAM Employing Complementary Transistor Switch (CTS) Memory Cell
4,596,004	D. R. Kaufman	High Speed Memory With a Multiplexed Address Bus
4,596,037	D. R. Bourchard, J. L. Danton, K. A. Dawson, and D. J. Sloma	Video Measuring System for Defining Location Orthogonally
4,596,039	J. L. Mitchell and K. L. Anderson	Method for Converting an Image from a Run End or Run Length Presentation to a Bit Map
4,596,478	P. J. DeGeorge, R. F. Ross, and D. E. Sims	Automatic Format, Mode Control and Code Conversion for Data Processing and Printing Apparatus
4,596,479	E. G. Lean, K. S. Pennington, S. C. Tseng, and H. C. Wang	Dot Matrix Printer
4,596,505	H. D. Seelinger	Automatic Loader/Unloader for Slitter
4,596,733	M. S. Cohen, K. S. Pennington, K. G. Sachdev, and W. D. Weber	Electroerosion Recording Material with Polyorganosiloxane Overlayer
4,596,739	D. H. Piltingsrud and J. C. S. Shen	Rigid Magnetic Recording Media
4,597,042	D. D. d'Angeac, M. A. Lechaczynski, M. Pauporte, and P. Thery	Device for Loading and Reading String of Latches in a Data Processing System
4,597,051	W. F. Beausoleil, D. M. Pangerc, and V. D. Winkler	All Points Addressable Printer/Storage Tube Image Copier System
4,597,177	L. M. Baldauf, E. J. Girvan, R. B. Overfield, and G. C. Roberts	Fabricating Contacts for Flexible Module Carriers
4,597,328	J. E. Carrington and G. R. Westcott	Print Hammer Flight Time Control System
4,597,825	J. L. Freeouf, T. N. Jackson, P. Oelhafen, G. D. Pettit, and J. M. Woodall	Intermediate Passivation and Cleaning of Compound Semiconductor Surfaces
4,597,996	L. N. Chellis	Process of Laminating with an Epoxy Composition
4,598,017	T. M. Bayer, H. Hinkel, K. Kleischmann, U. Kuenzel, and R. Schäfer	Composite Magnetic Disk with Si and SiC Substrate
4,598,107	L. W. Herron and R. W. Nufer	Stepwise/Ulimate Density Milling
4,598,283	M.-H. G. Tung and H. Yanagisawa	Method for Converting the Number of Bits of Input Bit Stream
4,598,327	S. Jen and W. J. Kabelac	Servo Control System Using Servo Pattern Time of Flight for Read/Write Head Positioning in a Magnetic Recording System
4,598,330	G. K. Woodworth	High Power Direct Current Switching Circuit
4,598,356	M. E. Dean and D. L. Moeller	Data Processing System Including a Main Processor and a Co-Processor and Co-Processor Error Handling Logic
4,598,364	P. H. Gum, A. L. Levin, R. M. Smith, and J. H. Wilson	Efficient Trace Method Adaptable to Multiprocessors
4,598,384	J. C. Shaw and T. G. VanKessel	Graphics Display with Improved Window Organization
4,598,390	Y. H. Chan	Random Access Memory RAM Employing Complementary Transistor Switch (CTS) Memory Cells